Surface, Expeditionary Warfare Directors Outline Challenges, Programs

ARLINGTON, Va. – The directors of Surface Warfare and Expeditionary Warfare described their extensive and well-coordinated programs to build the forces needed to meet the challenges of the renewed era of great power competition, during a presentation to the Surface Navy Association's annual symposium Jan. 15.

Surface Warfare Director Rear Adm. Ronald A. Boxall warned that the challenges being presented by a resurgent Russia and the rapidly growing Chinese navy means "we can't continue doing what we've been doing," but must build a lethal, distributed surface force that "can take the fight to the enemy."

The path to that capability is set by the Surface Capability Evolution Plan that seeks to put the most capability at sea, Boxall said.

That plan is looking at a new frigate as the future small surface combatant, a new large surface combatant and a range of unmanned vessels, he said.

But there will be a focus on producing a common combat system for all those ships, to eliminate the different training programs now required by the various combat systems in the fleet. The plan also will emphasize increased offensive lethality and improving the speed by which new capabilities reach Sailors, he said.

Boxall repeated his view that the replacement for the aged Ticonderoga-class cruisers "may not be a cruiser." The focus is on looking at what capabilities that ship will need that

the future DDG 51 destroyers cannot provide. The ship will be designed with the space, weight, electrical power and cooling to support whatever sensors, payloads and command and control systems it will need.

But they also will be seeking smaller versions of those systems that could be put on smaller combatants or even unmanned vessels, he said.

Boxall also stressed a focus on improving integrated training systems on the future ships to allow crews to get the quality training at sea now being provided in port.

Marine Maj. Gen. David W. Coffman said his office is working on the next generation of expeditionary warfare and the "need to reinvigorate maritime maneuver warfare."

Coffman cited the plans for the future amphibious fleet, which will be built around 12 of the "big-deck" amphibious assault ships capable of employing the fifth-generation F-35B fighter, helicopters and surface connectors – including the new model of the landing craft air cushion, a new landing craft utility and the amphibious combat vehicle – and 36 versions of the LPD 17 amphibious platform ships.

But his job includes a drive to rebuild a mine warfare capability with both the mine clearance mission and offensive sea mining, which has virtually disappeared, and supporting the Expeditionary Combat Command that includes the riverine and coastal operations craft and the Sea Bee construction teams, and the Naval Special Warfare Command's SEAL commandos and special warfare delivery craft.

Coffman said he also is working to meet the demand from Marine Corps Commandant Gen. Robert B. Neller to regain the small boat capability the Marines gave up more than a decade ago.

Asked what is being done to improve the amphibious force's capability to support the Navy in the fight for sea control in

the littoral areas, Coffman said no decision has been made on whether the amphibious ships will be armed and, if so, with what weapons. But, he said, the Marines are developing plans to use their weapons from the shore to support the fleet's sea control fight.

Return of Great Power Competition Demands Shift to 'Culture of Excellence'

ARLINGTON, Va. – The return of great power competition requires the Navy's surface forces to move from "a culture of compliance to a culture of excellence," one that recognizes standards as the baseline, strives to be the best of the best and focuses on owning the fight, the commander of Naval Surface Forces said Jan. 15.

While compliance is important, a culture of excellence is essential to bringing "superior performance and winning," and a "sense of urgency in all we do," Vice Adm. Richard J. Brown, who also is commander of Naval Surface Forces Pacific, told the opening session of the Surface Navy Associations annual symposium.

That sense of urgency is required because the national security and national defense strategies, and the Navy Strategy from Chief of Naval Operations Adm. John Richardson, are all maritime strategies "that call for sea control whenever and wherever we need it, requiring our surface navy to deter, but if necessary, fight and win the battle for sea control now in an age of great power competition," Brown said.

After the collapse of the Soviet Union in 1989, the Navy had “unfettered access and control of the sea to go wherever we wanted to go and do whatever we wanted,” the admiral said. But now Russia has re-emerged to challenge the Navy in the Atlantic and the eastern Mediterranean and China is “in full challenge mode inside the first island chain” in the Pacific.

Meeting those challenges requires the surface force to not only shift to a culture of excellence, but to “embrace the concept of mission command,” that requires combat-ready ships, with full system redundancy “to go to sea and support sustained combat operations.

It also requires tough, battle-minded crews and bold, confident commanding officers “driven to win and hungry for the challenge of command,” he said.

Brown said the surface force also needed “an integrated combat system that doesn’t care if it is on a cruiser, a destroyer, a frigate or an amphib, but that provides for rapid capability upgrades and fleet commonality. It also needs advanced long-range, multimission weapons; small, medium and large unmanned surface vessels; a capable frigate and a new large surface combatant, he said.

The surface naval force is making the changes needed, with 2018 focused on raising standards, improving training, tightening up qualifications, re-emphasizing certifications and reasserting the primacy of command, Brown said. In 2019, “we must turn readiness into lethality … through unrelenting pursuit of excellence.”

Brown also touted the role of a surface warfare development command that can take risks and develop concept of where the surface navy should go in the future.

Effort Underway to Extend Service Life of Light Armored Vehicles

MARINE CORPS BASE QUANTICO, Va. – The fleet of Marine Corps Light Armored Vehicles (LAVs) will begin receiving a number of necessary upgrades under the terms of a $37.2 million contract awarded Jan. 4. General Dynamics Land Systems-Canada will perform the work, which includes the procurement of 60 hardware kits in support of the Light Armored Vehicle Reset Program. The enhancements are designed to extend the service life of the LAV into the 2030s.

Embedded in their original design, LAVs combine speed, maneuverability and firepower to perform a variety of functions, including security, command and control, reconnaissance and assault. The first LAVs were initially fielded in 1983.

The reset effort will focus on five key areas:

■ Modernized powerpack to improve reliability, cooling capacity and diagnostics with the added benefit of better fuel economy.

■ New drive train which will improve towing capability.

■ Steering dampener to improve road feel and usability.

■ Digitized drivers' instrument panel.

■ LAV 25 slip rings – doubling power supply capability to the turret and modernized to handle additional channels for gigabit Ethernet, video and fiber optics.

“The Marine Corps is committed to ensuring this platform remains viable into the 2030s,” said Steve Myers, LAV program manager.

Active light armored reconnaissance battalions will be the first units to receive the upgraded vehicles, which will become LAV A3s.

The hardware kits will be installed at Marine Corps Depots, with initial operational capability targeted for the second quarter of fiscal 2021.

The contract was awarded through the Army Contracting Command in Warren, Michigan.

Moran Stresses Speed, Urgency in Building Navy of the Future

ARLINGTON, Va. — Speed and a sense of urgency will be the keys to delivering the Navy of the future “for all the young officers and Sailors” now working their way up through the ranks, Vice Chief of Naval Operations (VCNO) Adm. Bill Moran said during his keynote address at the Surface Navy Association annual symposium Jan. 15.

After asking for the young Sailors and Midshipmen in the audience to stand and be recognized, Moran noted, “I hope you are excited about the future. … There is a lot to look forward to.”

Addressing more senior military and industry leaders, he then emphasized that, “The mission we have is to deliver a Navy

that’s bigger and more capable, a Navy focused on innovating and iterating the current force while growing new platforms and capabilities for the future.

“These young men and women deserve a Navy that moves faster, buys and delivers faster, orients and decides faster and, ultimately, puts a weapon on target faster than our adversaries. They deserve a Navy that places an aggressive, determined and unrelenting focus on readiness and warfighting in the here and now.

“Let’s do this together and take full advantage of the time we spend here this week to do something to ensure that we build and maintain a Navy worthy of the young men and women in the audience today,” he said.

Recent history has presented challenges in accomplishing that goal, Moran noted, with sequestration, continuing resolutions and spending caps compounded by nearly 20 years of land- and air-based operations in Afghanistan and Iraq and an expanding mission profile for the fleet worldwide that have stretched resources thin and established a “mindset of scarcity” that has been hard to shake.

“We’ve garnered a whole bunch of experience meeting urgent requirements. Yet I would argue we have very little memory of the strategic long game. We became accustomed to staring a 1-meter targets instead of preparing for future uncertainties,” he said.

“In this new age of rising competition, meeting near-term mission at the expense of long-term investment in people and equipment will no longer be an option. It won’t prepare us for the high-end fight, and it won’t allow us to grow and maintain the Navy our Sailors and American people deserve.”

The larger budgets of the past couple years have allowed the service to address maintenance backlogs and manning shortfalls and improve training, but it has taken time to make wise

investments in readiness, he said, time the Navy can ill afford. But the tide does seem to be turning.

“After a year of run-time and lessons learned, and an unrelenting focus on process improvements and a greater sense of urgency, we are now seeing concrete signs of progress. Our leaders are thinking different, planning for the future and owning readiness again,” Moran said.

“We’ve got a long way to go, but we’re on the right path,” he said. “There is renewed energy in the force about doing things the right way, re-establishing good habits, raising the bar and doing things better than we’ve done for some time and, ultimately, better than ever. This builds confidence, and confidence is essential in an uncertain world,” one where great power competition on the open seas is back in play.

The VNCO stressed that speed remains one of the biggest challenges for service leaders, noting “it will determine how we position ourselves in a world where everything is moving faster than the way our system was built to respond or anticipate.”

But, he said, “believing in our Sailors, their ingenuity, their intellect and courage to innovate,” can help overcome this challenge. “Our success depends on their imagination. Our reliance on their ability to create, to think critically, to imagine and unknown future is truly the only certainty that we have for tomorrow.

“I don’t think I’ll ever be satisfied that we are fast enough in any domain. But I am very encouraged by the amount of collaboration and cooperation … in the effort to get at pace.”

Boeing to Deliver Second Batch of Net-Enabled Harpoons to Navy in 2020

ARLINGTON, Va. – Boeing will be delivering a second production run of Block II+ kits for the Navy's AGM-84 air-launched Harpoon cruise missiles in 2020, a company official said.

Jim Bryan, director of Cruise Missile Systems for Boeing Missile & Weapon Systems, in a Jan. 16 conversation at the Surface Navy Association symposium, said the second batch will follow the 15 missiles delivered in 2018. The quantity to be delivered in 2020 will depend on options selected by the Navy.

The Block II+ version of the Harpoon is a net-enabled weapon that can receive target updates via data link to more refine the missile's radar acquisition. Bryan said a Block II+ kit runs in the range of a couple hundred thousand dollars, much cheaper than delivering a new missile.

The Block II+ kits are being delivered to Naval Air Systems Command for airborne weapons. Bryan said Boeing stands ready to build kits for the surface-launched and submarine-launched versions of the Harpoon should the Navy determine a requirement.

Last summer, the Navy launched a Harpoon from the submarine USS Olympia during the Rim of the Pacific (RIMPAC) exercise for the first time in almost two decades. Bryan said that the Navy pulled it out of storage and Boeing inspected and recertified the missile for the shot.

He said the company would be interested in a contract to conduct similar re-certifications on other submarine-launched Harpoons and modernize them as well.

Six Harpoon missiles were fired during RIMPAC and all six were successful shots.

Bryan also pointed out the long shelf life and reliability of the existing Harpoon inventory.

He said the Navy's plan to increase the size of its battle force to 355 ships offers opportunities to Boeing to sell more Harpoons. The Harpoon is under tough competition from other cruise missiles with passive seekers, but he pointed out that only an active radar can give a sea-skimming missile a true all-weather capability.

The Harpoon is now fielded by more than 30 nations. The Block II, version which is not net-enabled, is marketed to international customers. Bryan said Boeing has the largest order backlog in the Harpoon program's history and will be meeting demand by expanding its manufacturing facilities.

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Program Manager: Zumwalt Class Will Influence Future Surface Combatant Designs

ARLINGTON, Va. – The Zumwalt DDG 1000-class destroyers are still early in their evolution, with questions remaining on how they will be armed, what size crew will be needed and how the novel "tumblehome" hull performs in heavy sea and wind conditions, but they are expected to influence the design of future surface combatants, the program manager said Jan. 16.

"The Navy considers this ship to be a game changer in the Pacific," Capt. Kevin Smith told reporters during a Naval Sea Systems Command briefing at the annual Surface Navy Association symposium.

Years later than expected, one of the massive warships – bigger than World War II heavy cruisers – has been commissioned but is more than a year from operational status, the second has yet to start the second phase of equipping, and the third and final ship is still under construction at the Bath Iron Works shipyard in Maine.

Initially intended as a land-attack warship providing long-range precision fire support for Marines ashore, the Zumwalts now are designated as surface strike platforms, with some anti-submarine capabilities. The status of the two 155 mm advanced guns systems (AGS) installed for the land-attack mission is in doubt after the long-range munitions developed for them proved to be too expensive.

Smith noted the separate testing of other munitions, including hypersonic guided projectiles fired last year from the standard 5-inch naval guns, that could be used with the AGS. But tests on Zumwalt are planned with Standard Missile-6 missiles and Smith said the program also is looking at the

naval-strike Tomahawk missile.

USS Zumwalt is in San Diego preparing for activation of its combat systems, which were installed there as the second phase of the construction and equipping process. The basic construction, called hull, mechanical, electrical, was completed at Bath before the ship transitioned to San Diego. Activation and testing of the Mk57 combat system, the SPY-3 X-band radar and associated systems must be conducted before Zumwalt can start the comprehensive operational testing that would qualify it for operational status, not expected until 2020.

Even before that, the ship has been getting underway regularly for testing and crew training, including three at-sea refuelings from a Navy oiler and "doing things with the fleet," Smith said.

During its design stage, the Zumwalt's hull form – which gets narrower at the top rather than at the waterline – was criticized as inherently unstable and dangerous. Smith and Capt. Drew Carlson, the current commanding officer, said the ship has proven to be more stable in turns than ships with conventional hulls in early at-sea trials. But Carlson said it sails differently, sliding through turns and "wants to go straight." It has yet to be tested in extreme sea conditions.

Meanwhile, the second ship, named for Medal of Honor recipient Michael Monsoor, a Navy SEAL killed in Afghanistan, is now in San Diego preparing to start combat system installation. It is scheduled to be commissioned Jan. 26. And the final ship, Lyndon B. Johnson after the former president, is completing construction at Bath.

U.S. 6th Fleet Commander: No Fixed Boundaries Between 6th, 2nd Fleets

ARLINGTON, Va. – The commander of the U.S. Navy's fleet in Europe and African waters said there will be no hard distinction between the respective areas of responsibility of the U.S. 6th Fleet and the newly established U.S. 2nd Fleet.

2nd Fleet was established in August and is scheduled to reach initial operational capability in mid-year. An earlier iteration of the 2nd Fleet, a fixture of the Cold War, was disestablished in September 2011. It operated primarily in the North Atlantic.

"Our idea is not to make a line in the water, because when you make lines, adversaries exploit them," Vice Adm. Adm. Lisa M. Franchetti, commander, U.S. 6th Fleet, Jan. 16 at the Surface Navy Association symposium. "Our idea is to work together between myself and [2nd Fleet Commander Vice Adm. Andrew L. "Woody"] Lewis to be able to figure out how to flow forces and work together to address whatever challenges come our way.

During the Cold War, 6th Fleet was much larger than its current force and mostly operated in the Mediterranean and Black Seas. Over the last five years, it has expanded its operations to include the Baltic Sea and North Atlantic and Arctic Ocean and off West Africa.

Franchetti said that until recently 6th Fleet had a relatively quiet existence, but the resurgence of Russian activity in the region has changed since 2014. Russian naval forces have been increasingly present in the Eastern Mediterranean, often in support of the Syrian forces in that country's civil war, and in the Baltic and North Atlantic, the latter reminiscent of the submarine activity during the Cold War.

“We are rebuilding muscle by dusting off the books [of the Cold War],” she said.

“The 6h Fleet has been operating at flank speed,” Franchetti said. “Operationally, it’s night and day different in 6th Fleet. The days of lengthy port visits and wine and cheese events have long since disappeared.”

Heavy Deployment Schedule Limiting Marine Corps Training Time

ARLINGTON, Va. — The Marine Corps is meeting its global commitments and national mission to be the ready expeditionary force but needs a reduction in its current high deployment rate to allow it to train the force for a possible future high-end fight, the Corps’ top resource officer said Jan. 16.

With one-third of its operating forces currently deployed overseas, “our surge forces on each coast are ready to go now,” and Marine forces “are responding and competing in every corner of the globe, providing critical deterrence, and when deterrence fails, they’ll fight and win,” Lt. Gen. Brian Beaudreault, the deputy commandant for Plans, Policy and Operations, said at the Surface Navy Association’s annual symposium.

While giving a generally positive view of the Corps status, with aviation readiness improving and its expeditionary forces supporting the anti-terrorism mission and training with allies and partners, Beaudreault presented a long list of things the Marines need to prepare for the future.

Those requirements included increasing the self-protection and offensive capabilities of the amphibious ships, moving toward the goal of 38 gators, continuing experiments with alternative platforms, including the littoral combat ship as a possible troop carrier and armed escort, and improving its long-range precision fires.

It also needs to improve its capabilities in information warfare, cyber defense, "protected mobility" with the Joint Light Tactical Vehicle and Amphibious Combat Vehicle, the multimission group five unmanned aerial vehicle program called MUX, and air defense capabilities.

Beaudreault gave significant emphasis to the growing threat from Chinese area-denial defense capabilities to the naval forces' ability to project power where needed, saying the Navy-Marine team must "maintain freedom of maneuver, leveraging freedom of the sea, using land-based expeditionary bases to hold adversary's assets at risk … [and] deliver long-range precision fires from land and sea base to achieve sea control or sea denial."

While urging faster acquisition of amphibious ships, he said the Marines must do better with what they have and "need to increase the offensive lethality of amphibious warships to meet the contested environment."

He said the amphibious fleet "must integrate organic vertical launch offensive and air defense capabilities and reduce its electronic signal."

But when asked, he said he did not know of any current program to add vertical launch systems in existing amphibs or put them in the LPD 17 variant being planned to replace the aged dock landing ships.

Beaudreault said the Marines were addressing future readiness on two paths – first, to meet its statutory mission of providing ready forces, and then preparing the force to combat

potential peer adversaries. The second path requires relief from its heavy deployment schedule, he said.

The Corps was operating at a one-to-two deploy-to-dwell rate, which he said was a “short-term decision made to balance modernization, satisfy global demand and meet the current requirement to regain readiness.”

The current deploy-to-dwell pace “does impact the Corps’ ability to execute a high-end combat mission” because of limited training time, he said.

If they added more people to reduce that deploy-to-dwell burden, it would create budget stress on modernization and readiness, he explained.

“So over time, we will need to reduce operational commitments in order to return forces back to CONUS [continental United States] and to get us into the desirable one-to-three” pace.

Talking to reporters after his remarks, Beaudreault said aviation readiness has improved after two years of increased budgets allowed an increase in depot maintenance, supply of spare parts and trained maintainers at the squadron level. He touted the F-35Bs for maintaining a high mission-capable rate on the first two at sea deployments.

And he said he was not concerned that the Marines would be unable to meet their recruiting goals with the current low unemployment rates, as the Army experienced last year.

“I have no reason to be greatly concerned,” he said. Having met their quotas every year for more than a decade, “we hope the past is an indicator of the future.”

CIAT Trains its First Ship

SAN DIEGO – Over 40 crew members of the guided-missile destroyer USS Rafael Peralta were the first to pilot the updated Advance Warfare Training (AWT) curriculum inside the Navy's newest combat systems trainer, Combined Integrated Air and Missile Defense/Anti-Submarine Warfare Trainer (CIAT), onboard Naval Base San Diego (NBSD), Jan. 8-11.

The Center for Surface Combat Systems (CSCS) officially opened the CIAT during a ribbon-cutting ceremony in December and is planned to deliver tactical training to all San Diego-based Baseline 9 warships.

"The overall purpose of CIAT is to capitalize on advances in virtual technology to deliver a warfighting laboratory that is realistic, relevant, and just as complex as the threat environment our deployed ships are sailing into," said Lt. Cmdr. Reisheid Dixon, CSCS Det. San Diego's officer in charge.

The CIAT facility currently provides Navy watchstanders a state-of-the art training environment to detect and engage the entire spectrum of naval combatants. With an emphasis on realism, it is engineered in every detail to replicate a naval warship's actual combat suite. The feedback from Rafael Peralta is overwhelmingly positive.

"We are honored and thrilled to be the first warship through CIAT," said Cmdr. Aaron DeMeyer, commanding officer. "It's clear that even this first iteration of the CIAT curriculum is far better than any training we could develop on the ship."

Moving away from pre-packaged training scenarios, the virtualization of the trainer is completely customizable by CSCS instructors. Evaluators can now employ advanced enemy tactics, reduce visibility, degrade weapons systems, overwhelm the radars with clutter returns, and in the end, force every single watchstander in the combat information center to adapt.

The first CIAT students were able to experience these advanced training capabilities.

“This is by far the most realistic level of complexity and integration that our ship’s training team has faced,” said Lt. j.g. Anthony Pronchilo, fire control officer.

Chief Operations Specialist Anna Penrod, anti-air warfare coordinator, has been through the AWT curriculum in the past, but not like this.

“The CIAT has so many features,” she explained. “This was our team’s first opportunity to combat a reactive threat or fight through an electronic attack. I know full well the next time we see this challenged battlespace may be on deployment.”

“There is a steep learning curve for every training event in CIAT,” said Lt. Aaron Van Driessche, CSCS Det. San Diego’s course supervisor for AWT. “Many of our students are seeing complex enemy tactics for the first time but it’s critical that they face these combat challenges now. We need to begin training ships for the worst case scenarios because when a ship leaves the pier, its mission could depend on it.”

The CIAT is also equipped with a full debrief room capable of replaying all scenarios. CSCS instructors can break-down, in exact detail, every choice made by a ship’s combat team.

“The debrief room allowed us to articulate the full PBED process – plan, brief, execute and debrief,” said Lt. Wayne Badstuebner, tactical action officer evaluator. “With the ability to relive every scenario in the debrief, the feedback loop was instantaneous, and their team was maturing with every run.”

This multimission and shore-based trainer also executes training at a lower cost compared to training live on shipboard systems.

“CSCS’ CIAT is a game changer,” said Capt. David Fowler, commodore, Destroyer Squadron 23. “It provides the most realistic combat systems training of any system to date. The full potential of CIAT’s capabilities are yet to be experienced.”